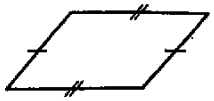
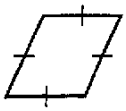
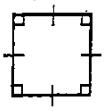
Name _____ Date _____

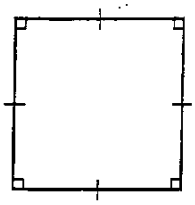
5-3 Study Guide

Classifying Quadrilaterals

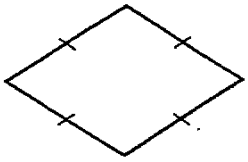
A **quadrilateral** is a figure with four sides and four angles. You can use sides and angles to classify quadrilaterals.

Parallelogram	Opposite sides are parallel. Opposite sides are congruent.	
Trapezoid	One pair of parallel sides.	
Rectangle	Opposite sides are parallel. Opposite sides are congruent. All four angles are right angles.	
Rhombus	Opposite sides are parallel. All four sides are congruent.	
Square	Opposite sides are parallel. All four sides are congruent. All four angles are right angles.	

Example **Identify all names that describe each quadrilateral.**

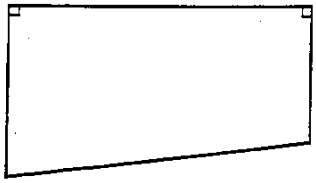


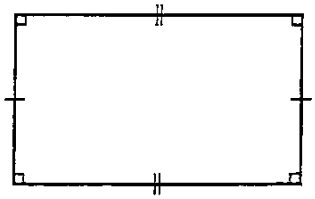
quadrilateral
parallelogram
rectangle
rhombus
square

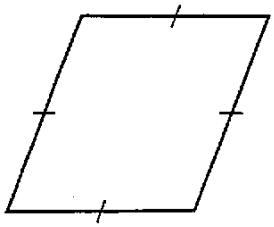


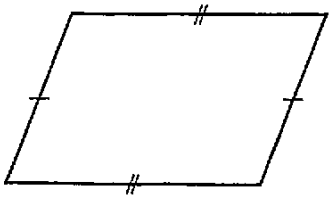
quadrilateral
parallelogram
rhombus

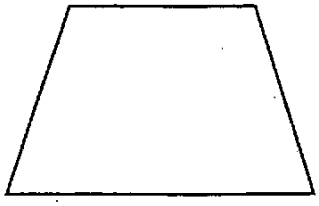
Let Q = quadrilateral, P = parallelogram, R = rectangle, S = square, RH = rhombus, and T = trapezoid. Write all of the letters that describe the figure inside it.

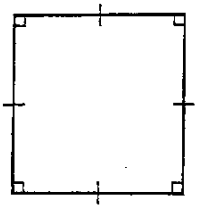
1. 

2. 

3. 

4. 

5. 

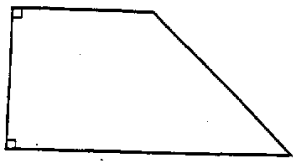
6. 

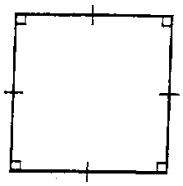
Name _____ Date _____

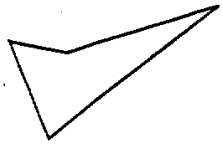
5-3 Practice

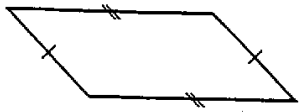
Classifying Quadrilaterals

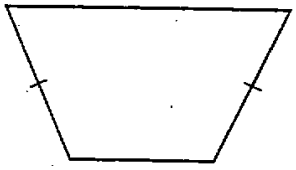
Let Q = quadrilateral, P = parallelogram, R = rectangle, S = square, RH = rhombus, and T = trapezoid. Write all of the letters inside the figure that describe it.

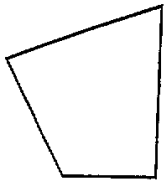
1. 

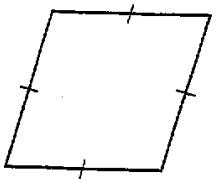
2. 

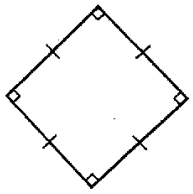
3. 

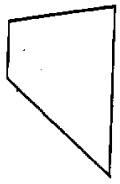
4. 

5. 

6. 

7. 

8. 

9. 

10. Name all of the quadrilaterals that are both a rhombus and a rectangle.

Tell whether each statement is true or false. Then draw a figure to justify your answer.

11. A rectangle has opposite sides congruent.

12. A trapezoid can have three right angles.

13. In square $ABCD$, $m\angle A = 3x°$, $m\angle B = (x + 60)°$, $m\angle C = (4x - 30)°$, and $m\angle D = (2x + 30)°$. Find the value of x.

14. In trapezoid $QRST$, $m\angle Q = 60°$, $m\angle R = 120°$, $m\angle S = 113°$, and $m\angle T = a°$. Find the value of a.